

EXHIBIT A
TO JUNE 8, 2020 COMPLAINT

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A Detailed Music-Analytical Comparison of Marvin Gaye and Ed Townsend's

"Let's Get It On" and

Ed Sheeran and Amy Wadge's "Thinking Out Loud"

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Preamble: Sources and Objective

1. The following document undertakes a detailed music-analytical study of two musical works:

- a) "Let's Get It On" musical composition, reflected in:
 - (i) the sheet music, submitted to the United States Copyright Office in 1973 in connection with Copyright Registrations EU422281 and EP314589, renewed in 2000 as RE 0000848835 and RE 0000840063, respectively; and
 - (ii) the studio recording of Marvin Gaye's "Let's Get It On" (45 rpm single, Tamla T 54234F, released 1973, submitted to the United States Copyright Office in 1973 in connection with Copyright Registration N: 7555, renewed as RE0000860111)¹; and

¹ "Let's Get It On" was written by Marvin Gaye and Ed Townsend. The sheet music was published by Jobete Music Company and Cherritown Music Company in 1973.

b) the studio recording of Ed Sheeran's "Thinking Out Loud" (released on Asylum-Atlantic in 2014).²

2. The objective of this study is to analyze and identify any significant similarity between the two works through the use of standard and commonly used methods of technical musical analysis. The following analysis will demonstrate that the strong and marked similarity arises through the use in both works of a combination of a certain chord progression with a certain bass line, as well as through the shared rhythmic articulation of this chord progression-bass line combination, referred to as the "backing pattern." This backing pattern is present in most of the measures in each work. The similarity between the two musical works is further reinforced by distinct parallels in the melodies that exist between the two and the use of similar tempos in the recorded versions under consideration here. The concept of "stylistic commonplace" will be employed to establish that the Sheeran recording utilizes material from the Gaye-Townsend composition in ways that are distinctive and are not the result of general stylistic practice.

I understand that recent legal decisions indicate that the scope of protection afforded to a musical composition under the Copyright Act may be limited by what was submitted as "deposit copy" with the United States Copyright Office, and thus if what was submitted was sheet music, the scope of copyright protection would be based on what one would read and play from the sheet music. I further understand that Structured Asset Sales, LLC disagrees with the legal position of being limited to the sheet music deposit copy. I further understand that Structured Asset Sales, LLC takes the position that even if it is

² "Thinking Out Loud" was written by Ed Sheeran and Amy Wadge. The sheet music was published by Sony/ATV Music Publishing Limited UK and BCI Music Ltd. in 2014.

correct that the scope of protection afforded a musical composition under the Copyright Act is limited to what is reflected in the “deposit copy,” the scope of the “Let’s Get It On” composition encompasses both the deposit copy sheet music submitted in 1973 and the 1973 sound recording.

I am not an attorney, and therefore take no position as to the legal issues described above. I do, however, take them into account in my analysis below. As discussed, it is my finding that the two musical works share striking similarities, regardless of whether the source for the “Let’s Get It On” composition is the sheet music and the sound recording, or the sheet music alone.

I. Primary Aspects of Similarity

3. The two works share a distinctive combination of musical materials, designated in this study as the backing pattern; it is comprised of a coordination of harmony (chord progression), bass line, and rhythm. The backing pattern as it occurs in these two works refers to a combination of music played from the sheet music by a competent musician, as well as the equivalent combination as it is played by the drums, bass, and guitar and/or keyboards in the recordings. In the case of both recordings considered here, this combination of instruments functions as the accompaniment to the vocal line, and it is not crucial that the instruments from each track be identical—the emphasis for this report is on the function of the backing pattern, which is essentially present to support the vocal line.³ When played from the sheet music by, for example, a solo pianist, the backing pattern

³ Another annotation or recording of either of these tunes could articulate the backing pattern using a range of various instrumental combinations, and indeed, this is often the case with cover versions

is likewise present as the accompaniment to the vocal melody.⁴ This backing pattern held in common between the two works can be seen in the first four measures of the sheet music, and heard at 0:00-0:07 in the Gaye recording and at 0:00-0:06 of the Sheeran recording. After its initial appearance in each song, this pattern is repeated many times during both works, becoming a major element in each song and forming a distinctive accompaniment to the vocal melody in each case.

I.1: Chord Progression

4. The distinctiveness of this backing pattern arises in part from the harmony, or “chord progression” that it articulates. In music theoretical terms, we hear the “tonic” chord (designated as “I”) with the first scale degree in the bass, followed by a chord with the third scale degree in the bass, then the “subdominant” chord (or “IV”) with the fourth scale degree in the bass, and finally the “dominant” chord (or “V”) with the fifth scale degree in the bass.⁵

(which, of course, require artists to license content from the copyright holder). It often happens that multiple versions of a single song will be available even from the original artist, especially when live versions are taken into account. In each of these cases, the specific instrumentation may vary while the backing pattern remains intact.

⁴ When performed by a single pianist, the vocal melody need not be sung, as anyone who has heard a cocktail pianist knows. For the purposes of this analysis, it makes no difference whether the melody is sung or played instrumentally.

⁵ The term “scale degree” is commonly used to designate a particular note’s place within a particular scale. For example, using a simple C-major scale (C, D, E, F, G, A, B, C), we would refer to the first note in the scale, C, as “scale-degree one” or “first scale degree”—meaning simply that it is the first note in that scale. It thus follows that D would be referred to as “second scale degree” and E as “third scale degree,” etc. The usefulness of the “scale degree” designation is that it allows musicians to discuss the properties of these notes in a way that is transferable across all keys, making comparisons between songs and musical passages much more effective.

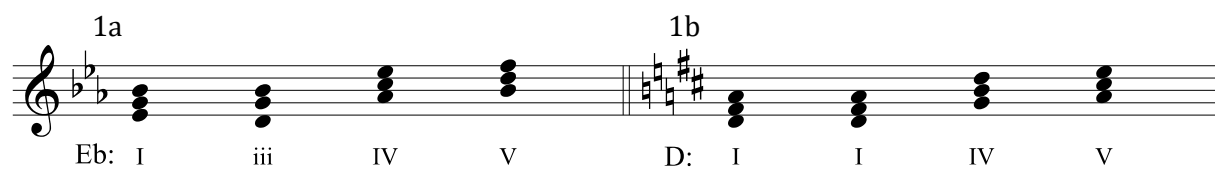
5. Gaye and Townsend's "Let's Get It On" is based a chord progression formed by the chords E-flat, G minor, A-flat, and B-flat. Musicians commonly assign roman-numeral labels to chords in order to specify their harmonic function, and these numerals are based on the position of each chord with regard to the scale in use. The chord built on the first note of the scale—a C note in C major, for instance—will be labeled "I." In a similar manner, those based on the second, third, fourth, fifth, sixth, and seventh notes will be labeled "ii," "iii," "IV," "V," "vi," and "vii⁰" respectively (note that upper-case numerals are used for major chords and lower-case numerals for minor chords).⁶ This system of labeling is so common that there is almost no student who studies music in North America who does not learn these numerals at some point in his/her training.

6. Using this system, the chord progression employed in the backing pattern of Gaye and Townsend's song may be written as I – iii – IV – V (see example 1a). This is a very common progression, used in many songs, and by itself—as an isolated entity—does not constitute an element that one could copyright in most cases. The Sheeran and Wadge work employs a slight adjustment to this chord pattern: the I, IV, and V chords are maintained from the Gaye and Townsend work, but the iii is replaced with a common substitute. As any freshman harmony textbook will attest, the I chord with the third scale degree in the bass may stand in (or substitute) for the iii chord without affecting the function of the

⁶ A lower case numeral with a superscripted zero—shown here as "vii⁰"—designates a diminished chord. For purposes of the current discussion, the commonly used term "chord" should be considered synonymous with the more precise term, "triad." There are many chords that are not triads, but such chords will not play a role here. Note as well that roman numerals are used to identify harmonies (or chords) in analysis, while Arabic numerals are used to identify single notes as scale degrees (see footnote 5 above).

progression (the bass lines in each recording are discussed in more detail immediately below). The Sheeran and Wadge work uses this chord, commonly labeled “I⁶,” as a slight modification the Gaye and Townsend original (see example 1b), producing a mild variant that is harmonically equivalent: I – I⁶ – IV – V.⁷

Examples 1a (Gaye-Townsend) and 1b (Sheeran-Wadge): chord progressions compared



7. In the Gaye-Townsend work this chord progression within the backing pattern occurs in the key of E-flat, while in Sheeran-Wadge work the progression occurs in D major. Because of the power of the roman numerals (and scale degrees) to capture the relationship between the chords in each case, however, listeners will hear the two progressions as functionally equivalent. Thus, the strong and marked similarity between the use of this progression in Gaye-Townsend and Sheeran-Wadge songs is not significantly affected by the different keys used. That different keys do not affect the identity of a song is borne out by the fact that singers often change the keys of songs to suit their voices. In fact, the value to musicians of thinking about chord progressions in the manner described here

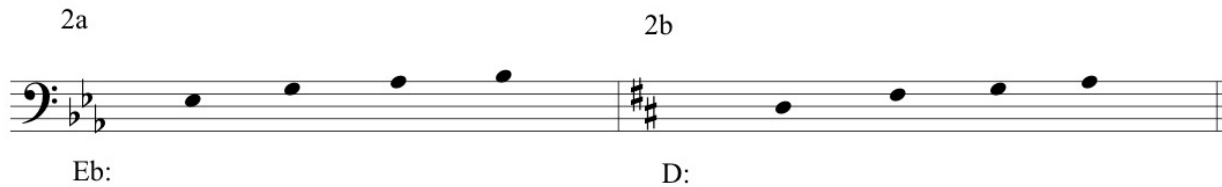
⁷ The following is drawn from a popular undergraduate harmony textbook: “Although scale-degree 3 in the bass is most often harmonized by I⁶, it can also be harmonized by a root-position mediant chord. In this way, iii may substitute for I⁶ to create a tonic extension . . .” See Steven G. Laitz, *The Complete Musician: An Integrated Approach to Tonal Theory, Analysis, and Listening*, 2nd ed. (New York: Oxford University Press, 2008), p. 446. Laitz, chair of the Department of Music Theory and Analysis at The Juilliard School, uses a musical example drawn from Peter, Paul, and Mary’s recording of “Puff the Magic Dragon” to illustrate this point (see p. 447).

(employing roman numerals) is that they make it easy to “transpose” (or change the key of) any given song quickly. Such transposition is considered a basic skill for professional musicians and music educators. Many listeners will not recognize that Frank Sinatra sang “My Way” in D major, while Elvis Presley sang that song in C major; it is clearly the same song despite the difference in key. The difference in key between those two versions of “My Way,” is actually slightly greater than the difference between the Gaye-Townsend and Sheeran-Wadge songs considered here. Without a direct A-B comparison of the two, virtually no listener (except the very few who possess perfect pitch—less than 1% of the population) would be able to hear the difference in key between the two songs. In fact, a vinyl recording of the Sheeran recording running a little fast and one of the Gaye recording running a little slow would meet in the middleground separating the two, making them identical. In short, the backing patterns of these two works use equivalent progressions, with the Sheeran-Wadge work introducing only one minor variation on the Gaye-Townsend work (see example 1a and 1b for comparison).

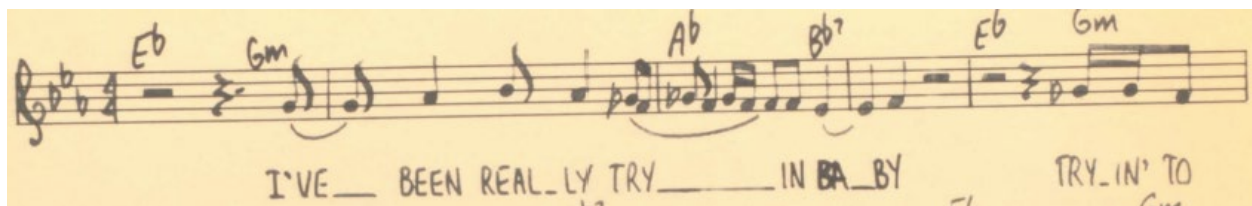
1.2: Bass Line

8. An important part of why the chord progression sounds the way it does has to do with the notes that comprise the bass line in each song. As a matter of musical analysis, a bass line is a structural element in the music that can be realized in performance in any number of ways. In a solo piano or guitar performance, for instance, the bass line will consist of the succession of the lowest sounding notes. Such a succession of lowest-sounding notes allows us to identify the bass line in Sheeran’s accompaniment to his singing on the guitar in the opening moments of his recording, for instance. In a solo piano

performance, the bass line is typically formed by the lowest notes played by the pianist's left hand. In a band setting, the bass line is usually played by the bass guitar, though in some cases the bass line can be played by a keyboard or even some combination of instruments. In the recording of the Gaye-Townsend work, the bass guitar plays an E-flat to accompany the I chord, and then a G to accompany the iii chord. The bass then employs an A-flat to support the IV chord, and a B-flat to support the V chord. This succession of notes on the bass guitar creates a bass line that goes: E-flat – G – A-flat – B-flat (see example 2a). This bass line is understood by musicians as the scale-degree pattern 1 – 3 – 4 – 5. Thinking of the bass line as 1 – 3 – 4 – 5 (instead of as specific notes) thus generalizes the relationship between the notes in a manner similar to that of the I – iii – IV – V pattern mentioned above. Sheeran's recording of "Thinking Out Loud" employs the bass notes D – F sharp – G – A to accompany its I – I⁶ – IV – V chord progression (see example 2b). While these specific four notes are seemingly very different from those used by in Gaye's recording, this difference is entirely due to the difference in key; the relationship between scale-degrees 1 – 3 – 4 – 5 remain unaffected by the change of key from E-flat to D: the two bass lines are equivalent. The fact that the bass line is played by bass guitar on the Gaye recording and by the lowest notes on Sheeran's guitar on his recording makes no difference from an analytical perspective.

Examples 2a (Gaye-Townsend) and 2b (Sheeran-Wadge): bass lines compared

8. It should be noted that the sheet music of “Let’s Get It On” does not notate a separate bass part. This sheet music deposit copy is in “lead sheet” format—a form of notation that is extremely common in the notation of popular music. A lead sheet typically provides the melody notated on the treble clef, with lyrics below and chord symbols above. Example 2c shows the first four measures of the “deposit copy” sheet music for “Let’s Get It On.” But even though a bass part is not specified here, any performer must play a bass line of some kind in order to realize the content of the lead sheet. After all, there must be a lowest-sounding note in any musical realization. The most direct and basic practice is for the bass line to be formed from the roots of each the chords specified above the melody in the lead sheet.

Example 2c (Gaye-Townsend): lead sheet showing melody, lyrics, and chord symbols

Since the chords specified are Eb – G minor – Ab – Bb⁷, the most obvious bass line is simply a succession of the notes Eb – G – Ab – Bb, and this is precisely what musicians would

understand the lead sheet to be specifying. Thus, a specific bass line is indicated by the chord symbols on the lead sheet, even though it is not notated separately.

9. When we think of Sheeran-Wadge work in terms of the roman numerals as we did with Gaye-Townsend work, the strong similarity between the two songs is further revealed. The Sheeran-Wadge work employs the identical⁸ chord-bass pairing as the Gaye-Townsend work song does: I – I⁶ – IV – V. Example 2d shows the chord-bass pairing in Gaye and Townsend’s “Let’s Get It On,” and example 2e shows the same pairing in Sheeran’s recording of “Thinking Out Loud.”

Examples 2d (Gaye-Townsend) and 2e (Sheeran-Wadge): chord-bass pairings compared

2d 2e

Eb: I iii IV V D: I I⁶ IV V

These examples demonstrate that the combination of the chord progression and bass line elements make this similarity even more distinctive and uncommon than it would be if either element were taken in isolation. The importance of this specific combination of elements is even more strongly reinforced when we consider the rhythm of this chord-bass pair.

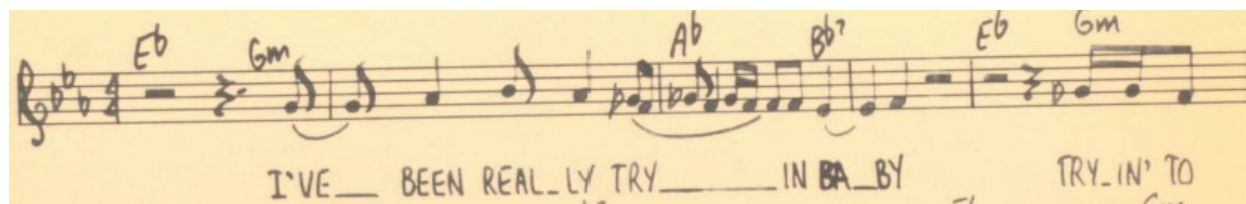
⁸ Allowing for the common substitution of I⁶ for iii, as discussed above.

I.3: Distinctive Harmonic Rhythm

10. There are many ways that musicians think and speak about rhythm. In order to examine the role rhythm plays in the similarity between these two songs, we will turn to a consideration of “harmonic rhythm.” The term harmonic rhythm refers to the timing of the chord changes in a song. Gaye and Townsend’s “Let’s Get It On” sets the I – iii- IV – V chord-bass progression to a distinctive rhythm as shown in example 3a. This rhythm extends over two measures (or bars) according to a “slow” 4/4 time signature (see below), dividing the duration of the first two chord-bass pairings unevenly, as represented by the dotted quarter and eighth note tied to a half note. The third and fourth chord-bass pairings divide the second measure in a parallel manner to the first measure. The musical notation of rhythm allows for alternate ways of notating the same rhythm. A second possible notation for this rhythm is notated below as “fast” 4/4. Note that the eighth notes in the “slow” 4/4 are notated as quarter notes in the “fast” 4/4 version. Otherwise there is no difference in these two ways of notating the harmonic rhythm of “Let’s Get It On: like the words “color” and “colour,” they will be indistinguishable in performance—one will not actually be faster or slower than the other. Most musicians listening to the Gaye recording would notate this rhythm in the “slow” 4/4 version. The Gaye-Townsend sheet music employs the “slow” 4/4 version. The harmonic rhythm in this sheet music is specified by precise placement of the chord symbols over the rhythms in the melody. Using the “fast” 4/4 as a guide, note that the Eb chord symbol appears directly over beat 1 in the first measure and the G minor symbol appears precisely over beat 4 in the same measure. Example 2c is shown here again but

now with beats in each measure shown below and beats on which the chords occur in bold and underlined.

Example 2c (Gaye-Townsend): lead sheet showing melody, lyrics, and chord symbols



Beats: 1, 2, 3, 4, 1, 2, 3, 4, 1 2, 3, 4, 1 2, 3, 4 1, 2, 3, 4, etc.

The Ab chord symbol is placed directly over beat 1 of the third measure while the Bb symbol is placed precisely over beat 4 in that same measure. This precise rhythmic placement of chord symbols is maintained throughout the sheet music submitted as a deposit copy.⁹

⁹ Note that the commercially available sheet music for “Let’s Get It On” does not accurately notate the rhythm as played on the recording nor as it appears on the deposit copy. This commercial sheet music has the V chord falling directly on beat 3 of the second measure of the “slow” 4/4 pattern, which is clearly not what happens on the recording nor on the deposit copy of the sheet music. Such discrepancies are common in commercial sheet-music versions of pop songs, which are often prepared with an eye toward producing an arrangement that is easy for the amateur to play. Syncopated rhythms like the one in the Gaye-Townsend work can be more difficult to play, so rhythms can sometimes be “smoothed out” for easier performance and sight-reading.

Time signature = “slow” 4/4

1 & 2 & 3 & 4 & | 1 & 2 & 3 & 4 &
 I iii IV V (harmonic pattern)

Time signature = “fast” 4/4

1 2 3 4 | 1 2 3 4 | 1 2 3 4 | 1 2 3 4
 I iii IV V

Example 3a (Gaye-Townsend): harmonic rhythm, chord-bass pairing, notated in “slow” 4/4

Example 3a (Gaye-Townsend) musical notation in Eb major, 4/4 time. The notation shows a piano introduction with a harmonic rhythm of two chords per measure. The chords are I (Eb), iii (F), IV (Ab), and V (Bb). The bass line follows the chord roots: Eb, F, Ab, Bb. The treble line features a melodic line with a descending eighth-note pattern in the first measure of each pair.

Example 3b (Sheeran-Wadge): harmonic rhythm, chord-bass pairing

Example 3b (Sheeran-Wadge) musical notation in D major, 4/4 time. The notation shows a piano introduction with a harmonic rhythm of two chords per measure. The chords are I (D), I⁶ (F#), IV (F), and V (A). The bass line follows the chord roots: D, F#, F, A. The treble line features a melodic line with a descending eighth-note pattern in the first measure of each pair.

11. Sheeran's "Thinking Out Loud" uses the identical harmonic rhythm as found in Gaye's "Let's Get It On," and this is shown in example 3b. Played in an A-B comparison, 3a and 3b make the strong similarity between the two songs abundantly clear. It does not require an understanding of standard rhythmic notation to see it in the sheet music and hear it in the music played from it that this rhythm is identical between the two songs.

I.4: Use of Backing Pattern in Song as a Whole

12. Having identified the similarity between the backing pattern in the Gaye-Townsend and Sheeran-Wadge works, we will now explore how often this pattern occurs in the deposit copy sheet music and in the two recordings. In terms of the use of backing pattern in "Let's Get It On," the sheet music and Gaye's recording are identical; timings from the Gaye recording as used in the following discussion can all be tracked to specific measures in the sheet music. As Example 4a shows, Gaye-Townsend work begins with a verse-chorus pair (0:00-0:48), following by a pair of verses (0:48-1:34). All of this music is based on the backing pattern, which occurs 16 times during these sections. Since the backing pattern is two measures in length, this means that the first 32 measures of the song all feature the backing pattern. Looking at the rest of the Gaye-Townsend work, we can see that there are, in fact, only two places in the song where the backing pattern is not present, and that is in portions of the bridge, which occurs twice overall on the recording. Adding up all of the measures of the song, it turns out that there are a total of 84 measures, of which 70 measures employ the backing pattern. This means that approximately 83% of the Gaye-Townsend work employ the backing pattern.

Example 4a (Gaye-Townsend): The overall musical form of “Let’s Get It On,” indicating the number times the backing pattern appears and showing the percentage of measures that it is present

Timing	Section	Description
0:00-0:25	verse	8 mm., uses backing pattern (4)*, two beat pick-up
0:25-0:48	chorus	8 mm., uses backing pattern (4)
0:48-1:11	verse	8 mm., uses backing pattern (4)
1:11-1:34	verse	8 mm., uses backing pattern (4)
1:34-2:20	bridge	16 mm., mixes backing pattern (3) in with new material
2:19-2:43	chorus	8 mm., uses backing pattern (4)
2:43-3:05	chorus	8 mm., uses backing pattern (4)
3:05-3:16	bridge	4 mm., mixes backing pattern uses only material from last 4 mm.
3:16-3:39	chorus	8 mm., uses backing pattern (4), free vocal improv
3:39-4:01	chorus	8 mm., fade in bar 5, uses backing pattern (4), free vocal improv

Total number of measures in song = 84

Total number of measures that employ backing pattern = 70 (83.3%)

Total number of times backing pattern appears = 35

*The numeral 4 in parenthesis indicates that the backing pattern appears 4 times. Because the backing pattern in two measures in length, four statements of this backing pattern will be eight measures in length.

13. Example 4b shows the structure of Sheeran and Wadge’s “Thinking Out Loud.”

Although the two works may have some differences, the backing pattern is present in 64 of the Sheeran and Wadge song’s 90 measures, meaning that this specific pattern is present during about 71% of the song. It is fair to conclude from this comparison that the backing pattern we have been discussing forms the basis of both songs, and that this backing pattern plays the same role in the Sheeran song as it does in the Gaye song.

Example 4b (Sheeran-Wadge): The overall musical form of “Thinking Out Loud,” indicating the number times the backing pattern appears and showing the percentage of measures that it is present

0:00-0:24	A – verse	8 mm., uses backing pattern (4)*
0:24-0:49	A’ – verse	8 mm., new melody, uses backing pattern (4)
0:49-1:13	B – bridge	8 mm., new chord progression, new melody
1:13-1:43	A’’ – verse	10 mm., new melody, uses backing pattern (4) except for last two measures
1:43-2:08	A – verse	8 mm., uses backing pattern (4)
2:08-2:49	A’ – verse	8 mm., new melody, uses backing pattern (4)
2:49-2:56	B – bridge	8 mm., new chord progression, new melody
2:56-3:27	A’’ – verse	10 mm., new melody, uses backing pattern (4) except for last two measures
3:27-3:51	A – verse	8 mm., guitar solo, uses backing pattern (4)
3:51-4:21	A’’ – verse	10 mm., new melody, uses backing pattern (4) except for last two measures
4:21-4:35	Ending (tag)	4 mm., repeats last two bars of A’’ two times

Total number of measures in song = 90

Total number of measures that employ backing pattern = 64 (71.1%)

I.5: Melodic Similarity

14. We now turn to a comparison of the vocal melody in these two songs. While there are certainly musical features that differ between the two songs overall, there are a two key melodic passages in the Sheeran-Wadge work that are strikingly similar to passages in the Gaye-Townsend work. This can be seen most clearly by comparing the first four measures of “Thinking Out Loud” with the second four measures of eight-bar chorus for “Let’s Get It On.” This comparison is shown in examples 5a and 5b. Note that timings are given for the Gaye-Townsend example to make it easier to locate the place in the song example 5a refers to. The sheet music and recording of the Gaye-Townsend work are identical with respect to melody and thus all timings given can be tracked to specific measures in the sheet music submitted as a deposit copy. Since the two works are in

different keys, the best way to compare the melodies is by using scale-degree numbers; identical numbers shared by notes in different songs mean that such notes would be the same if both songs were in the same key.¹⁰ In the first measure of the Gaye-Townsend example (5a), two sequences of scale-degrees are highlighted by underlining and enclosure within asterisks. The first of these is the scale-degree sequence 6 5 3 2, and the second is the scale-degree sequence 3 5 6 5 3. Note that both of these sequences occur mostly over the first measure of the two-measure backing pattern. The Gaye-Townsend example has been notated in “slow” 4/4 to allow easier comparison with the Sheeran-Wadge work.

15. Example 5b shows the first four bars of Sheeran’s “Thinking Out Loud.” Note that the scale-degree sequences 6 5 3 2 and 3 5 6 5 3 found in “Let’s Get It On” both appear in Sheeran’s vocal melody, and also mostly in the first measure of the two-measure backing pattern.¹¹ Thus, while there are important differences between the vocal melodies of these two works, there are also marked similarities that are crucial to note.

¹⁰ See footnote 4 above.

¹¹ In Gaye’s version of the first of these sequences (6 5 3 2), scale-degree 3 is sung as a flatted 3 (b3)—a typical “bending” of the 3rd scale degree often used in popular music to impart a “bluesy” feel. Note that the sequence 3 5 6 5 3 actually appears twice in the Sheeran-Wadge example, but is only indicated once in Example 5b in order not to clutter the example.

Example 5a (Gaye): "Let's Get It On," last four measures of chorus (0:37-0:48)

1 1 1 *6 5 b3 2* 6 5 *3 5 6 5 3* 3 5 6

Let's get it on, su - gar, Let's get it on, Ooh

Eb: I iii IV V I iii IV V

Example 5b (Sheeran): "Thinking Out Loud," first four measures of song

Scale degrees: 3 5 *6 5 3 2* 1 2 3 5 1 *3 5 6 5 3* 3 2 1 1

When your legs don't work like they used to be - fore and I can't sweep you off of your feet

D: I I⁶ IV V I I⁶ IV V

1.6: Similar Tempos

16. Finally, it should be noted that the tempos of the recordings of these two works are very close: Gaye's recording clocks in at about 83 beats per minute, while Sheeran's sets a slightly slower pace of about 79 beats per minute. This is a very small difference, especially considering that the two works are in the same time signature of 4/4. In fact, within this tempo range any particular live performance of either song could vary by 4 beats per minute, thus erasing any difference, no matter how slight. Similarly to the remarks earlier in this study concerning the differences in key, most listeners could not detect the difference in tempo between the two songs if the songs were not placed in an A-B comparison with one another. In fact, certain performances in what the listener takes to be a steady tempo can actually include a slight increase (and less often decrease) in tempo over the course of the song without most listeners being aware of it. It is thus best to think

of tempo in terms of a “range of similarity” in which tempos that are within approximately 5% of one another can be considered equivalent (not unlike the way the “margin of error” functions in polling). Thought of in this way, the slower end of the tempo range for the Gaye recording overlaps the faster end of the tempo range for the Sheeran one: the two tempos are equivalent. The Gaye-Townsend sheet music does not specify tempo and so must remain outside the parameter of this particular part of the discussion.

II. Stylistic Commonplaces and the Measure of Musical Distinctiveness

17. There are many musical features in popular music that could never be copyrighted because they are shared within the style so broadly that no author could lay a successful claim to ownership. Consider the twelve-bar blues, a musical pattern that combines a relatively specific series of chord progressions with a specific rhythmic distribution of those chords within the pattern. Musicians have written songs based on the twelve-bar blues for many decades, and while specific other qualities of each of these songs can be copyrighted (melodies, distinctive instrumental riffs, lyrics, for instance), the use of the twelve-bar blues pattern in itself cannot be protected. Such commonly used musical elements like the twelve-bar blues pattern can be termed “stylistic commonplaces”—elements in a style that are in such widespread use within a musical culture that no single author can reasonably claim them to be original.¹² In identifying musical features of a song

¹² In classical music, certain commonplaces were prevalent and have been studied extensively by scholars. For instance, Leonard G. Ratner writes: “From its contacts with worship, poetry, drama, entertainment, dance, ceremony, the military, the hunt, and the life of the lower classes, music in the early 18th century developed a thesaurus of *characteristic features*, which formed a rich legacy for composers.” See his *Classic Music: Expression, Form, and Style* (New York: Schirmer Books,

and in support of claims of the distinctiveness of the material, it is useful to explore whether the features in question might be considered to be instances of stylistic commonplaces. And even if the presence of stylistic commonplaces is in play, does the author alter or customize such commonplaces such that a claim for musical distinctiveness can be successfully argued?

18. In the case of the present comparison between “Let’s Get It On” and “Thinking Out Loud,” it is clear that certain aspects of the backing pattern described above can be thought of in terms of stylistic commonplaces. A chord succession that simply moves through the I, iii, IV, and V chords cannot really be considered original, since there are other songs that employ this pattern. Likewise, bass lines that employ the 1 – 3 – 4 – 5 scale-degree pattern occur commonly enough, though perhaps this scale-degree pattern occurs more often in melodies and less often in bass lines; and the harmonic rhythm common between these two songs occurs in other songs as well.¹³

19. When one considers the combination of these three elements as described in this study, the backing pattern that occurs first in the Gaye-Townsend work and subsequently in the Sheeran-Wadge work rises clearly and decidedly above any classification of stylistic

1980), p. 9. In this classical music, the originality arises not from the use of commonplaces in itself, but rather from the ways in which they are employed and combined.

¹³ A similar instance can be found in jazz during the 1940s and beyond. According to Ted Gioia, “Frequently bebop composers simply grafted an exotic name and a new (usually more complex) melody onto the chords of earlier popular standards. Hence, ‘Anthropology’ borrowed the harmonies of ‘I Got Rhythm,’ and ‘Ornithology’ was a similar reworking of ‘How High the Moon.’” See his *The History of Modern Jazz* (New York: Oxford University Press, 1997), pp. 201-202. These bebop reworkings, however, were never hits; and it seems likely that if they had ever been commercially successful, the original songwriters would have sought compensation.

commonplace. While this backing pattern may employ individual elements that can be found elsewhere, it is the distinctive combination of these elements that forms the basis for a claim of originality. Taken together, the chord progression, bass line, and distinctive harmonic rhythm of “Let’s Get It On” form a single backing pattern that makes Sheeran and Wadge’s specific use of it in “Thinking Out Loud” unmistakable. The presence of this backing pattern throughout both songs—the way that it functions and the role it plays in each work’s formal design—further reinforces the similarity between the two songs: the backing pattern does not simply occur in both songs, it also functions in the same way in both. If this backing pattern were indeed a stylistic commonplace, we would hear this as a *stylistic* reference. But in this case, we hear Sheeran and Wadge’s use of this pattern as a specific reference to a particular song—Gaye and Townsend’s “Let’s Get It On.” The specific reference created by the use of the same backing pattern makes the melodic similarities between the two songs in the vocal part seem even more pronounced. It is possible that, taken in isolation, one might view these melodic similarities as a mere coincidence, arising from the limitation of the musical materials available within the pop style. But in light of the other marked musical parallels discussed here, the sense that these melodic passages in “Thinking Out Loud” create an additional set of references to “Let’s Get It On” is vastly increased. In the fullest musical and music-analytical context, it seems almost impossible—or at least impossibly unlikely—that these similarities arose by simply by chance.

III. Conclusion

20. The backing pattern made up of the combination of a shared chord progression, shared bass line, and shared harmonic rhythm confirm that the Sheeran-Wadge work

“Thinking Out Loud” appropriates distinctive material from Gaye and Townsend’s “Let’s Get It On.” As discussed above, although the bass line is not notated in the sheet music submitted as a deposit copy – because it is written in the “lead sheet” format – the bass line is clearly indicated to any experienced reader of music. Any of these elements taken in isolation might not be enough to trigger a sense of musical déjà vu. The combination of the three elements affirms the strong and unmistakable similarity between the two songs. In this case, the combination of these three elements is indeed distinctive enough to be considered a key element in the Gaye-Townsend work. The status of the backing pattern is indeed accompanimental, but popular music scholars have discussed the ways in which instrumental parts can become important “hooks” in songs—elements that are central to a song’s distinctiveness and identity.¹⁴ The presence of strong parallels in the melodies of these two songs, combined with the similar tempos employed, make the indebtedness of Sheeran and Wadge’s work to “Let’s Get It On” even stronger.

21. The three combined elements that combine to produce the backing pattern form a distinctive and important musical dimension in both songs. The harmonic rhythm-chord progression-bass line combination that makes up the backing pattern in the Gaye-Townsend work is very distinctive and constitutes a signature element of “Let’s Get It On”: it repeats many times throughout the song, contributing to the groove of the recorded

¹⁴ Walter Everett finds such instrumental hooks common enough in popular music to warrant a special term; he calls them “tattoos.” See his *The Foundations of Rock: From Blue Suede Shoes to Suite: Judy Blue Eyes* (New York: Oxford University Press, 2009). A few well-known examples would be the opening guitars licks in The Beatles’ “Day Tripper,” The Rolling Stones’ “(I Can’t Get No) Satisfaction” and The Byrds’ “Mr Tambourine Man,” as well as the keyboard intro in the Doors’ “Light My Fire.”

version of the song, establishing a sensual feel for the tune, and playing a key role in creating the special identity of “Let’s Get It On.” Sheeran and Wadge’s parallel use of this same harmonic rhythm/chord progression/bass line combination in the backing pattern for their work, most likely done intentionally, is striking and strongly evokes the Gaye-Townsend work to anybody who knows the 1973 composition or performances of it.¹⁵ In Sheeran and Wadge’s work, the three-element combination is used in much the same way as in “Let’s Get It On,” as it is repeated throughout the song to create feel and atmosphere. Thus the use of the backing pattern is not only extremely similar in terms of its structure, but also extremely similar in terms of its function. It is the distinctive combination of harmonic rhythm, chord progression, and bass line, combined parallels in the melody, similar function of the backing pattern within the song, and in the recording, almost identical tempos, that makes the similarity between Gaye and Townsend’s “Let’s Get It On” and Sheeran and Wadge’s “Thinking Out Loud” clear and unmistakable.¹⁶

¹⁵ This kind of overt reference to another piece of music has been called “musical borrowing” by scholars. Musical borrowing has a rich history in music, going back centuries. For a resource that provides a sense of the proportions of this borrowing of the centuries, visit the website, *Musical Borrowing: An Annotated Bibliography*, J. Peter Burkholder, ed. at <http://chmtl.ucs.indiana.edu/borrowing/>

¹⁶ This study has not devoted much attention to the lyrics in these two songs, and this is because, while both address the longing for a lover from whom the singer is in some way separated, no direct references can be identified that rival those found in the music itself. But since it is typical for references to other, prior works to create an additional layer of meaning in songs or other pieces of music, the question arises whether or not such a reference to Gaye and Townsend’s lyrics could be occurring in “Thinking Out Loud”—in other words, does this song’s reference to “Let’s Get It On” create what scholars would call an “intertextual reference”? It might be posited—though entirely in a subjective manner—that the protagonist in Sheeran and Wadge’s song is actually hearing “Let’s Get It On” while he is “thinking out loud” about the object of his affection. Perhaps hearing the song on the radio or in a pub triggers memories of their time together, and Gaye and Townsend’s song of sexual and romantic longing resonates and inspires the singer. Maybe it was “their song.” The listener hears “Let’s Get It On” in the backing pattern as Sheeran expresses his longing in the melody above it. In this way, both songs are present at the same time. Such a subjective reading should not form the sole basis for any legal ruling, but it does at least create a context in which Sheeran and Wadge’s use of Gaye and Townsend’s music can be imagined to be not only intentional, but also poetic and artful. For a study of intertextuality in classical music, see Michael L. Klein,

22. Any argument positing that the Gaye-Townsend work makes use of one or more prior works would need to address the distinctive combination of chord progression, harmonic rhythm, and bass line (backing pattern) as described and detailed above. It is likely that prior works could be identified that use all three of these elements individually, and perhaps even two of them together. This report argues that this distinct combination of three specific elements is original to “Let’s Get It On” and is not derived from a prior work. Add to this the melody the song, which in combination with the distinctiveness and structural function of the backing pattern make “Let’s Get It On” an instantly recognizable and original work that has become one of the classic songs in the history of American popular music.

I have not testified at trial or in deposition in the last four years.

I am being paid \$500 per for the study and testimony in the case.

A handwritten signature in black ink, appearing to read "John Cook". The signature is fluid and cursive, with the first name "John" being more prominent than the last name "Cook".

April 22, 2020

Intertextuality in Western Art Music (Bloomington and Indianapolis: Indiana University Press, 2005).

A Brief Bio

John Covach is Director of the University of Rochester Institute for Popular Music, Professor of Theory at the Eastman School of Music, and Professor of Music in the College Music Department at the University of Rochester. Professor Covach teaches classes in traditional music theory as well as the history and analysis of popular music. His online courses in rock music at Coursera.org have enrolled more than 350,000 students in over 170 countries worldwide.

Professor Covach has published dozens of articles on topics dealing with popular music, twelve-tone music, and the philosophy and aesthetics of music. He is the principal author of the college textbook *What's That Sound? An Introduction to Rock Music* (W.W. Norton), currently in its fourth edition and the most often-used textbook on rock music in the world. He has co-edited the influential collection, *Understanding Rock* (Oxford University Press, 1997), which was among the first books to undertake serious musicological analysis of rock music. He also co-edited *American Rock and the Classical Tradition and Traditions, Institutions, and American Popular Music* (Routledge), *Sounding Out Pop* (University of Michigan Press), and *The Cambridge Companion to the Rolling Stones* (Cambridge University Press). He is one of the founding editors for *Tracking Pop* (Michigan), a series devoted to scholarly monographs on popular music.

Professor Covach's writing for general audiences has appeared in many online venues, including Time, Fox News, CNN, the Huffington Post, Scientific American, New Scientist, and the Chronicle of Higher Education. He is often interviewed for press, radio, and television features by media outlets worldwide.

As a guitarist, Covach has performed widely on electric and classical guitar in both the US and Europe over the past thirty years, and recorded with the progressive rock band, Land of Chocolate. He has taught guitar at the Interlochen Arts Academy and the Eastman School of Music. His students have gone on to teach in university programs around the world and perform with top acts such as Shania Twain, Sting, and Alanis Morissette.

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EDUCATION

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Cognate Field: Composition
Dissertation: "The Music and Theories of Josef Matthias Hauer."
1985. Master of Music, Music Theory, University of Michigan.
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Research Paper: "Frank Martin and the Twelve-Tone System."
1983. Bachelor of Music, Music Theory, with high distinction, University of Michigan.
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ADDITIONAL EDUCATION

- 1993-95. Graduate course work in philosophy (non-degree seeking; 4 seminars, 12 credit hours), University of Texas-Dallas.
- 1987-88. Fulbright Scholar, University of Vienna and Hochschule für Musik, Austria.
- Classical guitar study with concert artists Robert Guthrie, Manuel Lopez-Ramos, and Matthew Mischakoff.

EXPERIENCE AND EMPLOYMENT

- 2012-present. Director, University of Rochester Institute for Popular Music.
- 2015-2018. Director, University of Rochester Institute for the Performing Arts.
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- 2005-present. Professor of Music, College Music Department, and Professor of Theory, Eastman School of Music, University of Rochester.
- 1995-2005. Associate Professor, Department of Music, University of North Carolina at Chapel Hill.
- 1991-1995. Assistant Professor of Music Theory, College of Music, University of North Texas.
- 1990-91. Visiting Assistant Professor and Mellon Postdoctoral Teaching Fellow in Music Theory, University of Rochester, New York.
- 1988-91. Visiting Instructor of Jazz and Classical Guitar and Director of Guitar Studies, Interlochen Arts Academy and the National Music Camp, Interlochen, Michigan.

PUBLICATIONS: Books

Victor Coelho and John Covach, eds., *The Cambridge Companion to the Rolling Stones* (Cambridge University Press, 2019).

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General Editor, with Jocelyn Neal and Albin Zak of *Tracking Pop*, a monograph series devoted to topics in popular music to be published by the University of Michigan Press.

Special Journal Issues

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Captain Beefheart (250), Donovan (200), The Doors (250), The Eagles (200), Herbert Eimert, Emerson, Lake, and Palmer (250), Fairport Convention (300), Fleetwood Mac (200), Josef Matthias Hauer, Jefferson Airplane (300), Jethro Tull (200), King Crimson (200), Love (200), Country Joe McDonald (200), The Mamas and the Papas (200), The Moody Blues (200), Procol Harum (200), Soft Machine (200), Steve Winwood (200), Yes (200)

Editorial Work:

Supervising Editor, *Theoria: Historical Aspects of Music Theory*, a juried journal, volumes 6-8.

Co-Editor (with William Lake), *In Theory Only* (12/7-8 through 13-8). This journal has now converted to a fully juried format.

Online Essays:

Regular blog at *The Huffington Post* (2014-present), several essays (Les Paul, Kurt Cobain, Elvis Presley, Led Zeppelin, The Beatles, The Rolling Stones, Michael Jackson).

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"Taking Pop Music Seriously," *Scientific American* (January 13, 2013) <http://blogs.scientificamerican.com/guest-blog/2013/01/18/taking-pop-seriously>.

AWARDS AND HONORS

2012-2015. Mercer Brugler Distinguished Teaching Professor, University of Rochester.

2007-08. Undergraduate Humanities Professor of the Year Award, University of Rochester.

2005. Professor Winner, Student Undergraduate Teaching and Staff Award, University of North Carolina.

2004 (spring). Recipient, University of North Carolina Research and Study Leave.

2003 (fall). Faculty Fellow, Institute for the Arts and Humanities, University of North Carolina.

2003. Distinguished Alumni Award, Schoolcraft College, Livonia, Michigan.

2003. Edward Graham Kidder Award (for outstanding teaching) presented by UNC Student Groups and Alumni Association.

2001. Outstanding Faculty Award (for outstanding teaching) presented by UNC Student Groups and Alumni Association.

1997 (Jan.-May). University of North Carolina Junior Faculty Research and Study Leave.

1994-95. University of North Texas Research Initiation Grant.

1992-93. University of North Texas Research Initiation Grant.

1992. National Endowment for the Humanities Travel-to-Collections Award, to support research at the Arnold Schoenberg Institute, Los Angeles, California.

1992. University of North Texas Junior Faculty Summer Research Award.

1990-91. Mellon Postdoctoral Fellow, University of Rochester.

1989-90. University of Michigan Rackham Predoctoral Fellowship.

1988-89. Dissertation Travel Grant, Rackham School of Graduate Studies, University of Michigan, to support a research trip to examine documents housed in various archives and libraries in Switzerland and Austria.

1987-88. Fulbright Scholarship, Music Theory, Vienna, Austria.

1985-87. University of Michigan School of Music Fellowship.

1985. Earl V. Moore Award, University of Michigan School of Music.

CONFERENCE PAPERS AND INVITED LECTURES

“Disruptive Intertextuality: Yes, King Crimson, and the Score for Vincent Gallo’s *Buffalo ‘66*”
2020 (spring), Music and the Moving Image Conference 2020, New York University.

“‘Of Warmth When You Die’: Yes, Fragility, and Transformation”:
2020 (spring), Project Network 2020, The International Network for the Study of
Progressive Rock, University of Ottawa, Ontario, Canada.

“The Long Song: Extended Form in Popular Music” (invited):
2019 (fall), Music Theory Lecture Series, Boston University, Boston, Massachusetts.
2019 (spring), Music Theory Lecture Series, Michigan State University, East Lansing.

“Where Form Meets Movement: Fred Astaire, Ginger Rogers, and the RKO Dances”:
2019 (spring), Music and the Moving Image Conference, New York University.

“Textural Stratification, The Rise of Multitrack, and Yes’ Classic Recordings”:
2019 (spring), Art of Record Production Conference, Berklee College of Music, Boston,
Massachusetts.

“‘I Can’t Hide’: Bob Dylan and the British Invasion”:
2019 (fall), World of Bob Dylan Conference, University of Tulsa, Oklahoma.

“The Schoenberg Analytical Legacy: Rudolph Reti and Thematic Transformation”:
2018 (fall), Arnold Schoenberg Symposium, Arnold Schoenberg Center, Vienna, Austria.

“George Harrison, Songwriter” (invited):
2018 (fall), The Beatles’ *White Album*: An International Symposium, Monmouth
University, West Long Branch, New Jersey.
2016 (fall), Music Lecture Series, Youngstown State University, PA.
2015 (fall). Music Lecture Series, The Pennsylvania State University, State College, PA.

“Cover Versions in Early Yes”:

2018 (summer), 3rd International Conference of The Project Network for the study of Progressive Rock, Lund University, Sweden.

"Singles, Albums, and the Rise of Rock Ambition of the 1960s" (invited speaker):

2018 (spring), Kern Conference 2018 – Design, Sound and Vision in Midcentury Media, Rochester Institute of Technology, Rochester, New York.

“Fred Astaire, Judy Garland, and the Music-Structural Potential in Performance”:

2018 (spring), Conference: When the Music Takes Over, Musical Numbers in Film and Television, University of Salzburg, Austria.

“It’s a Man’s World? The Supremes in 1964”:

2017 (fall), annual conference of the American Musicological Society, Rochester, New York.

“Analyzing Texture in Rock Music: Stratification, Coordination, and Location”:

2017 (fall), 27. Arbeitstagung der Gesellschaft für Populärmusikforschung (GfPM) und der 17. Jahreskongress der Gesellschaft für Musiktheorie (GMTH) "Populäre Musik und ihre Theorien. Begegnungen – Perspektivwechsel – Transfers," University of Music and Performing Arts, Graz, Austria.

2017 (fall), invited lecture, Music Theory Colloquium, The Robert Samels Visiting Scholar Series, Jacobs School of Music, Indiana University Bloomington

“Analyzing Form in Popular Music: History, Style, Aesthetics, and Data”:

2017 (summer), European Music Analysis Conference (EuroMAC), University of Strasbourg, France.

“Rock Music, The Hippie Aesthetic, and the Middlebrow Impulse”:

2017 (summer), Conference: Music and the Middlebrow, University of Notre Dame, London Global Gateway (UK).

“On a Train at a Station: *Sgt. Pepper* and the Journey of Style” (invited keynote):

2017 (summer), Sgt. Pepper Symposium, Summit of Creativity: A Celebration of the Fiftieth Anniversary of the Beatles' *Sgt. Pepper's Lonely Hearts Club Band*, University of Michigan, Ann Arbor.

"Schoenberg's (Analytical) Gaze: The Aesthetics of Organicism":

2017 (spring), Annual Conference of the Music Theory Society of New York State, Hobart and William Smith Colleges, Geneva, New York.

“The Integrated Curriculum and Music Theory”:

2016 (fall), special panel presentation of the Music Theory Pedagogy Interest Group, Annual Conference of the Society for Music Theory and American Musicological Society, Vancouver, British Columbia.

“A View from Guitarland: Shifting Positional Listening in Complex Textures”:

2016 (fall), Annual Conference of the Society for Music Theory and American Musicological Society, Vancouver, British Columbia.

“Positional Listening in the Performer’s Experience” (invited paper):

- 2016 (summer), Conference: Investigating Musical Performance, Fondazione Giorgio Cini, Venice (Italy).
- "Positional Analysis, and 'And You And I'":
2016 (summer), History, Analysis, Pedagogy—Music Analysis Conference (HapMac), University of Nottingham (UK).
- "I Get Up, I Get Down: Progressive Rock and American Middle-Brow Culture" (invited keynote):
2016 (spring), Second International Conference of The Project Network, University of Edinburgh (UK).
- "Vanilla Fudge and the Psychedelic-Symphonic Cover Version"
2016 (spring), EMP Pop Conference, EMP Museum, Seattle, WA.
- "It's a Man's World? The Supremes in 1964":
2016 (spring), Greater New York Chapter of the American Musicological Society, Columbia University
- "High Brow, Low Brow, Knot Now, Know How: Music Curricula in a Flat World" (invited keynote):
2015 (fall). Music Symposium IV, University of Michigan, Ann Arbor, MI.
- "Cover Stories: The Nice, Paul Simon, Yes, and the Transformation of Meaning" (invited):
2015 (fall). Music Theory Symposium, Florida State University, Tallahassee, FL.
- "George Harrison, Songwriter" (invited):
2015 (fall). Music Lecture Series, The Pennsylvania State University, State College, PA.
- "The Promise and Perils of Online Learning, or Can You Really Teach 40,000 Students At Once?":
2014 (summer), Music Educators Workshop, University of Rochester Institute for Popular Music, Rochester, NY.
- "Closer to Home? Grand Funk and the Great Lakes":
2014 (spring): Annual Conference of the International Association for the Study of Popular Music, US chapter, Chapel, NC.
- "Yes's 'Heart of the Sunrise': Textural Stratification and Formal Fragmentation":
2013 (fall), Annual Conference of the Society for Music Theory, Charlotte, NC.
- "Before the Invasion: London, Liverpool and British Pop in the Early 1960s" (invited):
2013 (fall), College of Music Lecture Series, University of North Texas, Denton, TX.
- "Yes, the Psychedelic-Symphonic Cover, and 'Every Little Thing':
2013 (fall), University of North Texas Graduate Symposium (keynote address), Denton, TX.
2013 (fall), Music Department Lecture Series, SUNY Fredonia.
2013 (summer), PopMAC conference, University of Liverpool, UK.
- "'Who Are You?' Young Guitarists You May Know":
2013 (summer), Music Educators Workshop, University of Rochester Institute for Popular Music, Rochester, NY.
2013 (winter), Suncoast Music Education Symposium, School of Music, University of Southern Florida, Tampa, FL.

- "Form in Rock Music: Structure and Rhetoric" (invited lecture):
2012 (winter), University of Buffalo Music Lecture Series, Buffalo, NY.
- "Barbarians at the Gates: Rock Music in the University" (invited lecture):
2011 (winter), Music Department special lecture, Ithaca College, NY.
- "Schoenberg and the Aesthetics of Musical Time and Space" (invited conference lecture):
2007 (summer) "The Air of Other Planets; Arnold Schoenberg's Chamber Music,
Carleton University, Ottawa.
- "The Hippie Aesthetic and Its International Resonances":
2007 (summer), "New World Coming: The Sixties and the Shaping of Global
Consciousness," Queens University, Kingston, Ontario.
- "Form and Texture in Rock Music" (invited lecture):
2007 (spring), Faculty of Music, The University of Western Ontario
- "The Hippie Aesthetic: Cultural Positioning and Musical Ambition in Early Progressive Rock"
(invited paper):
2005 (fall), "Composition and Experimentation in British Rock: 1966-1976," Department
of Musicology of the University of Pavia, Cremona, Italy.
- "Jimi Hendrix and the Pentatonic Experience":
2005 (fall), Department of Musicology of the University of Bologna (invited lecture)
2004 (fall), annual conference of the Society for Music Theory, Seattle, Washington.
- "The Hippie Aesthetic: Rock Music from 1966-1979" and "The Early Years of the Twelve-Tone
Idea" (invited guest lectures):
2005 (spring), Department of Music, Trinity College, University of Dublin, Ireland.
- "Leiber and Stoller, The Coasters, and the 'Dramatic AABA' Form":
2004 (fall), annual conference of the International Association for the Study of Popular
Music-USA, University of Virginia.
- "Authenticity at the Borders of Style":
2004 (fall), annual conference of the American Society for Aesthetics, Houston, Texas.
- "Hand Jive and Ear Prudence" (with Walter Everett):
2004 (spring), annual conference of the Society for American Music, Cleveland, Ohio.
- "Form and Compositional Process in Rock Music" (invited guest lecture):
2004 (spring), University of North Carolina at Greensboro.
- "Analyzing Popular Music" (invited presentation and panel discussion):
2004 (spring), annual conference of the West Coast Society for Music Theory, University
of California at Santa Barbara.
- "Romantic Warriors? Stylistic (Con)fusion in 70s Rock and Jazz":
2002 (spring), Carolina Jazz Symposium, Chapel Hill, North Carolina.
- "Birds of Ire? Structure, Texture, and Influence in the Music of the Mahavishnu Orchestra":
2001 (fall), annual conference of the Society for Music Theory, University of
Pennsylvania.

- “Some Remarks on Textural Stratification in 20th-Century Music” (invited guest lecture):
2001 (spring), Eastman School of Music, Rochester, New York.
- “From Craft to Art: Formal Structure in the Music of the Beatles’:
2001 (spring), annual conference of Music Theory Southeast, Bob Jones University.
- “The Big Jingle-Jangle: Folk Rock, The Byrds, and the Electric Twelve-String Guitar”:
2000 (fall), annual conference of the Society for Music Theory
- “American Progressive Rock and the Avant-Garde”:
1999 (spring), annual conference of the Society for American Music, Ft. Worth, Texas.
- “Musical Worlding in a ‘Roundabout’ Way” (invited guest lecture):
1998 (spring), Music Lecture Series, Department of Music, Yale University.
2001 (spring), School of Music, University of Oregon.
- “Teaching Popular Music” (panel discussion and presentation):
1998 (spring), annual conference of the Sonneck Society for American Music, Kansas City, Kansas.
- “Jazz-Rock? Rock-Jazz? Stylistic Crossover in Late-1970s American Progressive Rock”:
1997 (fall), annual conference of the Society for Ethnomusicology and the International Association for the Study of Popular Music (US chapter), Pittsburgh, Pennsylvania.
- “Barbarians at the Gates of Musicology: Rock and Academic Music Scholarship” (invited paper):
1997 (spring), special conference, “Re*pre*sent*ing Rock,” Duke University, Durham, North Carolina.
- “Thinking in Rock”:
1996 (fall), annual conference of the Society for Music Theory, Baton Rouge, Louisiana.
- “Progressive Rock: An Overview”:
1996 (fall), special conference, “Cross(over) Relations: Popular Music and the Canon,” Eastman School of Music, Rochester, New York.
- “Genesis’ ‘The Musical Box’ as Song” (invited panel discussion participant and moderator):
1996 (spring), special conference, “Music and {Con}Text,” Duke University, Durham, North Carolina.
- “Twelve-Tone Music in the Middle Voice: The Hölderlin Lieder of Josef Matthias Hauer” (invited paper):
1996 (winter), special conference, “Austria, 1996-1996: Music in a Changing Society,” Ottawa, Canada.
- “Herbert Eimert and the Twelve-Tone Idea”:
1995 (fall), annual conference of the American Musicological Society, New York, New York.
- “Contemplating Popular Music”:
1995 (fall), annual conference of the Society for Music Theory, New York, New York.
- “‘You Mean People Still Listen to That Stuff?’: Notes From the Progressive Rock Underground”:

1995 (fall), annual conference of the International Association for the Study of Popular Music-USA, Nashville, Tennessee.

“Musical Communities, Communities of Music: A Hermeneutic Approach to Musical Meaning” (invited paper):

1995 (spring), special conference, “Bordercrossings: Future Directions in the Study of Music,” Ottawa, Canada.

“A Pitch-Class Set Approach to the Twelve-Tone Music of Josef Matthias Hauer” (invited paper):

1994 (fall), special conference, “Josef Matthias Hauer’s Twelve-Tone Music and Constructive Realism,” Wiener Neustadt, Austria.

“The Early Development of the Twelve-Tone Idea”:

1994 (fall), annual conference of the Society for Music Theory, Tallahassee, Florida.

“Schoenberg’s Turn to an ‘Other’ World” (poster presentation):

1994 (fall), biennial conference of the Society for Music Analysis (LancMAC), Lancaster, England.

“Musical Worlding: Heidegger’s Fundamental Ontology and the Understanding of Music” (invited paper):

1994 (spring), North Texas Heidegger Conference, Denton, Texas.

“Fred Lerdaahl the Composer: Questions of Tonality and Context”:

1993 (fall), annual conference of the Society for Music Theory, Montreal, Canada.

“We Can Work It Out: Musical Analysis and Rock Music”:

1993 (summer), biennial conference of the International Association for the Study of Popular Music, University of the Pacific, Stockton, California.

“We Won’t Get Fooled Again: Music Theory and Rock Music”:

1993 (spring), Music Theory Midwest Conference, Madison, Wisconsin.

“Yes, ‘Close to the Edge,’ and the Boundaries of Rock”:

1992 (fall), annual conference of the International Association for the Study of Popular Music-USA, Denton, Texas.

1992 (summer), conference on popular music held at Thames Valley University, London, England.

“Hauer’s Manuscripts”:

1992 (spring), Music Theory Midwest Conference, Columbus, Ohio.

“The Sources of Schoenberg’s ‘Aesthetic Theology’”:

1991 (fall), annual conference of the American Musicological Society, Chicago, Illinois.

“Schoenberg’s ‘Poetics of Music’ and the Twelve-Tone System”:

1991 (fall), City University Music Analysis Conference, London, England.

1991 (fall), annual conference of the Society for Music Theory, Cincinnati, Ohio.

“Schoenberg and the Occult: Some Reflections on the Musical Idea”:

1991 (fall), Music Theory Society of New York State/Arnold Schoenberg Institute Conference, Columbia University, New York.

“Frank Zappa’s ‘Teen-Age Prostitute’: Stylistic Juxtaposition and Social Criticism”:

1991 (fall), annual conference of the College Music Society, Chicago, Illinois.

“Intertextuality, Stylistic Commonplaces, and the Problem of Authorship in Rock Music”:

1991 (fall), annual conference of the International Association for the Study of Popular Music-USA, Chicago, Illinois.

“The Twelve-Tone Aesthetics of Josef Matthias Hauer”:

1991 (winter), New England Conference of Music Theorists, College of the Holy Cross, Worcester, Massachusetts.

1990 (fall), Eastman School of Music Symposium on Music Theory, Rochester, New York.

1990 (fall), annual conference of the College Music Society, Washington, D.C.

“Musical Humor, Stylistic Competencies, and ‘This is Spinal Tap’”:

1990 (fall), annual conference of the Society for Music Theory, Oakland, California.

1990 (spring), annual conference of the International Society for the Study of Popular Music-USA, New Orleans, Louisiana.

1990 (spring), Music Theory Midwest Conference, Northwestern University, Evanston, Illinois.

1990 (fall), Symposium on Rock Music, University of Rochester, New York.

“Nomos: The Twelve-Tone Law of Josef Matthias Hauer”:

1990 (winter), Music Theory Canada 1990, London, Ontario.

1990 (winter), Indiana Symposium for Music Theory, Bloomington.

“The *Zwölftonspiel* of Josef Matthias Hauer”:

1989 (winter), New England Conference of Music Theorists, Brandeis University, Waltham, Massachusetts.

1989 (fall), annual conference of the Society for Music Theory/American Musicological Society, Austin, Texas.

“Adorno and the Twelve-Tone Technique”:

1987 (fall), German Department Colloquium, University of Michigan, Ann Arbor.

“The Symphonies of Hans Werner Henze”:

1987 (winter), Michigan Academy of Arts and Sciences, Ann Arbor.

“Schoenberg’s *Grundgestalt* and Musical Idea”:

1986 (winter), Indiana Symposium for Music Theory, Bloomington.

PROFESSIONAL ACTIVITIES: PERFORMANCE

Director and Instructor, 2013-present, Eastman Rock Guitar Workshop (summer workshop for high-school guitarists).

Director and Instructor, 2012-present, Eastman Classic Rock Workshop (summer ensemble for high-school musicians).

Instructor, Eastman Guitar Workshop, 2012 (summer workshop for high-school and college-age guitarists in classical, jazz, and rock).

CD release, John Covach, *Live at Eastman* (Ivory Tower, 2012).

Band leader and member, 2011-present, Minstrels in the Gallery, Rochester/Cleveland-based Jethro Tull tribute band.

Band leader and member, 2011-present, Heat of the Moment, Rochester-based Asia tribute band.

Band leader and member, 2011-present, Out on the Tiles, Rochester/Buffalo-based Led Zeppelin tribute band.

Band leader and member, 2009-present, Going for the One, Rochester-based Yes tribute band.

Band leader and member, 2009-present, Heroes for Ghosts, Rochester-based Pink Floyd tribute band.

Band leader and member, 2007-present, The Smooth Talkers, Rochester-based rock quintet.

Band member, 2003-present, Land of Chocolate, North Carolina-based rock quartet.

Band member, 2008-2010, The Waiting Room, Rochester-based Genesis tribute band.

Host, 2005-2010, Radio Rock, a weekly one-hour show on WRUR-FM devoted to rock music and its history.

CD release, Land of Chocolate, *Regaining the Feel* (Slipt Disc, 2004).

CD release, Land of Chocolate, *Assorted Nonpareils* (Slipt Disc, 2003).

Featured performer (electric and acoustic guitars) in William Bolcom's *Songs of Innocence and of Experience* with the St. Louis Symphony Orchestra, Leonard Slatkin, conductor. Performances in St. Louis (12 and 13 November 1992) and at Carnegie Hall, New York (21 November 1992).

Clinician in teaching rock music: presentations at the Rock and Roll Hall of Fame and Museum, Cleveland, OH (June 1998, 1999, 2000, 2001), the Brightleaf Music Workshop, Durham, NC (July 1998 and 1999), and the Cleveland Youth Orchestra (2004, 2006).

Member of many bands over the years, playing many performances in North America.

PROFESSIONAL ACTIVITIES: ACADEMIC

Workshop Leader, Institute for Music Theory Pedagogy Summer Workshop (2014).

Participant, Mannes Institute for Music Theory, The State of the Discipline (2011).

Workshop Leader, Mannes Institute for Music Theory, Jazz and Pop (2008).

Participant, Mannes Institute for Music Theory, The Music of Arnold Schoenberg (2007).

Member, Society for Music Theory, Music Theory Society of New York State, Society for American Music, International Association for the Study of Popular Music, American Musicological Society, Mu Beta Psi, and Pi Kappa Lambda.

Member, SMT Publications Award Committee, 2015-17.

Member, AHJ AMS 50 Award Committee, American Musicological Society, 2013-present.

Member, Editorial Board, *Journal of Popular Music Education*, 2016-present.

Member, Editorial Board, *Journal of Musicological Research*, 2006-2015.

Member, Editorial Board, *Journal of Music Theory*, 2006-2010.

Member, Editorial Board, *Twentieth-Century Music*, 2002-2014.

Member, Editorial Board, *Music Theory Spectrum*, 1999-2003.

Member, Editorial Board, *Intégral*, 1999-2006.

Member, Editorial Board, *Popular Music Online*, 2000-present.

Chair, Society for Music Theory Popular Music Interest Group, 1998-2000.

Member, Program Committee, Annual Conference of the Music Theory Society of New York State (2011).

Chair, Program Committee, Annual Conference of the Music Theory Society of New York State (2010).

Member, Program Committee, Annual Conference of the Society for Music Theory (2003).

Member, Program Committee, Annual Conference of the Society for American Music (2000).

Member, Program Committee, Annual Conference of the Society for Music Theory (1998).

Member, Society for Music Theory Committee on Diversity, 1995-97.

Member, AMS Council (1997-99).

Chair, Popular Music Interest Group of the Sonneck Society (1993-98).

Member, Executive Board (1992-98), International Association for the Study of Popular Music-USA.

Chair, Program Committee, annual meeting of the International Association for the Study of Popular Music-USA (October 1996).

Member, Program Committee, annual meeting of the Southeastern Music Theory Society (March 1996).

Member, Program Committee, annual meeting of the Texas Society for Music Theory (March 1994).

Member, Local Arrangements Committee, International Association for the Study of Popular Music international conference at the University of the Pacific, Stockton, California (July 1993).

Chair, local arrangements, International Association for the Study of Popular Music-USA conference at the University of North Texas, Denton, Texas (October 1992).

Reader/grader, GRE Revised Music Test.

Consultant and reader, University of Rochester Press, University of Michigan Press, University of California Press, Oxford University Press, Harvard University Press, Greenwood Press,

Pendragon Press, University of Tennessee Press, University of North Carolina Press, Prentice Hall, and Harcourt Brace Jovanovich.

ALUMNI LECTURES

Various topics in popular music delivered in Rochester, Boston, Philadelphia, Austin, Dallas, Houston, Denton, Naples, Los Angeles, San Francisco, Seattle, and Portland.

COURSES TAUGHT

University of Rochester/Coursera (online MOOC):

History of Rock, Part One, <https://www.coursera.org/course/historyofrock1>

History of Rock, Part Two, <https://www.coursera.org/course/historyofrock2>

The Music of the Beatles, <https://www.coursera.org/course/beatles>

The Music of the Rolling Stones, <https://www.coursera.org/course/rollingstones>

University of Rochester:

MUR 101, Music and Meaning.

MUR 125, History of Rock Music

MUR 129, The Music of the Rolling Stones

MUR 130, The Music of the Beatles

MUR 131, Rock Music in the 1970s

MUR 180, Rock Repertory Ensemble

MUR 211, Sophomore-Level Theory and Analysis

MUR 212, Sophomore-Level Theory and Analysis

MUR 214b, Analysis of Popular Music

MUR 230/430, The Beatles: Music Analysis

MUR 235/435, Progressive Rock in the 1970s

Eastman School of Music:

MHS 281, History of Rock Music

MHS 281, The Music of the Beatles

MHS 281, The Music of the Rolling Stones

MHS 281/MT 481, Progressive Rock in the 1970s

MT 481, The Beatles: Music Analysis

MT 581, "Analysis of Popular Music" (graduate seminar)

MT 115, Aural Skills Review for Graduate Students.

University of North Carolina at Chapel Hill:

Music 6, First-Year Seminar: "The First Wave of Rock and Roll, 1955-64."

Music 21, Fundamentals of Music.

Music 31, Music Theory 1.

Music 32, Music Theory 2.

Music 33, Analysis of Popular Music.

Music 37, Music Theory 3.

Music 43, History of Rock Music.

Music 55, Topics in the History and Culture of Music: "The Concept Album in Rock"

Music 81, American Popular Song: "The Beatles, the British Invasion, and Psychedelia."

Music 89, Topics in Music Literature: "British Rock in the 1970s."

Music 89, Topics in Music Literature: "Seventies Rock."

Music 161, Structural and Stylistic Analysis (graduate seminar).

Music 248, "Analyzing Popular Music" (graduate seminar).
Music 248, "The History of Twelve-Tone Theory" (graduate seminar)
Music 248, "Music and Secular Spirituality" (graduate seminar).

Courses for the Adventures in Ideas, Continuing Studies, and Distance Learning programs.

University of North Texas:

MUTH 1380/1480, Freshman-Level Harmony and Ear Training.
MUTH 2480/2490, Sophomore-Level Harmony.
MUTH 3510, Form and Analysis.
MUTH 3410, Sixteenth-Century Counterpoint.
MUTH 4370, Schenkerian Analysis I.
MUTH 5470, Schenkerian Analysis II.
MUTH 5080, Pedagogy of Music Theory.
MUTH 5382, Aural Skills Review for Graduate Students.
MUTH 5350, Modern Harmony: "From Tonality to Atonality."
MUTH 5370, Twentieth-Century Theory and Analysis.
MUTH 6510, Analytical Techniques II (1700-1900).
MUTH 6680, Doctoral Seminar: "The Avant Garde in Europe and the US"
MUTH 6680, Doctoral Seminar: "The Theories of Robert Morris and David Lewin."
MUTH 6710, Analytical Systems II (History of Music Theory after 1900).
MUMH 3020, History of Rock Music.

GRADUATE THESIS AND DISSERTATION ADVISING

Ph.D. dissertations at Eastman (chair):

Aaron Vanvalkenburg, Drumming feels and grooves in 70s rock (in progress).
Anna Stephan Robinson, Phrase Structure and Form in the Songs of Paul Simon (2009).

Ph.D. committees at Eastman:

Daphne Tan (music theory), *Musikpsychologie* (1931) as Music Theory: A Study of Ernst Kurth's Last Work (2013; Robert Wason, chair).
Sara Nicholson (musicology), Beyond Quotation: Intertextuality in Popular Music Since 1990 (2006; Martin Scherzinger, chair);
Ben Wadsworth (music theory), Motivic Structure in Atonal Music (2007; Dave Headlam, chair).
Jason Titus (music theory), Modal Improvisation and Composition in the Music of Miles Davis, 1958-68 (2010; Matthew Brown, chair).

DMA committees at Eastman:

Michael Hardy, classical guitar (2014; Nicolas Goluses, chair).
Jonathan Fitzgerald, classical guitar (2012; Nicholas Goluses, chair).

B. Mus. Theses in Music Theory at Eastman:

Miles Cole, Captain Beefheart's Trout Mask Replica (2013).
Dan Cox, Ametrical Technical: Difficulties of Entrainment in Metal Subgenres (2010).
Skye Jenkins, Meditative Music: Eastern thought in Western Music, The Music of John Cage and Josef Matthias Hauer (2008).

Kaufmann Entrepreneurial Award projects at the University of Rochester

David Bendes, *The Business of Music: Music Industry Education for the Non-Musician* (2011-12).

Josh Reed, "The Crossover Project: A Plan for Popular Music Performance in Collegiate Music Education" (2008-09).

David LeBlanc, "The Crossover Project: A Plan for Popular Music Performance in Collegiate Music Education" (2008-09).

Ph.D. dissertations at UNC (chair):

Richard Allen Rischar, *One Sweet Day: Vocal Ornamentation and Style in the African-American Popular Ballad, 1991-1995* (2000);

John Lowell Brackett, *Milton Babbitt's Metatheoretical Essays: A Cultural and Historical Context* (2003);

Margaret Elizabeth McGinnis, *Messiaen's Aesthetic of the Sensuous* (2004; recipient of a 2002-03 UNC Dissertation Completion Fellowship);

Akitsugo Kawamoto, *Stylistic Development of Rock-Classical Intertextuality in the Music of Keith Emerson* (2006);

Andy Flory, *Making Music at Motown: An In-Depth Look at the Creative Process from 1959-1979* (2006; recipient of a 2005-2006 UNC Dissertation Completion Fellowship and member of the Royster Society of Fellows);

Paul Harris, *U2's Creative Process: Sketching in Sound* (2007).

Ph.D. committees at UNC:

Matthew Baumer, *Representation of the Feminine in Nineteenth-Century Orchestral Program Music* (2002; Evan Bonds, chair);

Elizabeth Kramer, *The Idea of Art Religion in German Musical Aesthetics, 1790-1830* (2005; Evan Bonds, chair).

M.A. theses in music (chair), UNC:

Martha C. Bausch, *Pale Imitations? Vanilla Ice, the Beastie Boys, and the Question of White* (1997);

John Lowell Brackett, *Herbert Eimert and the Early Twelve-Tone Idea: An Analysis of the *Atonale Musiklehre* and *Fünf Stücke für Streichquartett** (1999);

Margaret Elizabeth McGinnis, *Eternity and Dazzlement in Messiaen's *Livre d'orgue** (1999);

Joel Mauger, *Interactions of Musical Genre, Structure, and Style in Puff Daddy's Single "I'll Be Missing You"* (2001);

Marc Medwin, *Hybridity and Multidirectionality in John Coltrane's Late Music* (2002);

Joe Gennaro, *What's the Buzz? An Analysis of the Rock Opera *Jesus Christ Superstar** (2003);

Mark Porcaro, *Polyphony and Stratification in Luciano Berio's *Sequenza XI per chitarra** (2003).

M.A. committees at UNC:

Lisa Chensvold, *Vincent d'Indy as Pedagogue: Philosophy and Method at the Parisian Schola Cantorum* (1997; Severine Neff, chair);

Brandon Derfler, *Process as Problem/Problem as Process : Schoenberg and John Adams* (1998; Severine Neff, chair);

Christina Brandt-Young, Gretchen, Antigone, Brunnhilde, and *das Weib des Zukunft*: Wagner's Response to Nineteenth-Century Gender Ideologies (1999; Sarah Weiss, chair);

Michele Clark, Performances of Beethoven's Symphonies in Vienna, 1800-1827 (1999; Evan Bonds, chair);

Andrea Adams, The Overture, the Symphony, and Mozart's Use of Sonata Form (2000; Evan Bonds, chair);

Seth Coluzzi, Liszt, Wagner, and the Paths toward Extended Tonality (2000; Severine Neff, chair);

Allan Friedman, Intersections of Power: Political and Social Discourse in South African Choral Competitions (2001; Sarah Weiss, chair);

Ethan Lechner, Hybridity in the Concert Music of Colin McPhee (2002; Sarah Weiss, chair).

Ph.D. committees at Duke University:

H. James Harkins (composition [with analytical essay]: 2001; Scott Lindroth, chair);

Nathaniel Stookey (composition [with analytical essay]: 2003; Scott Lindroth, chair).

Ph.D. committees at UNT:

Andrew Anderson, A Phenomenology of Music Analysis (music theory:1995; Graham Phipps, chair);

Sangtae Chang, Boulez's Sonatine and the Genesis of His Twelve-Tone Practice (musicology: 1998; Melena Kuss, chair).

M.Mus. theses in theory (chair), UNT:

Todd Russell Rober, Tonality and Harmonic Motion in Copland's *Appalachian Spring* (1993); Timothy Stephen Hughes, An Argument for the Reassessment of Stravinsky's Early Serial Compositions (1995);

J. Brian Gratton, Three Motivic Topics in Beethoven's Piano Quintet, op. 16 (1995);

James McGowan, Harmonic Organization in Aaron Copland's Piano Quartet (1995);

Sean Justin Finnegan, Schoenberg, Polyphony, and Mode: a Reception of the Composer's Twelve-Tone Method in American Publications, c.1925-1950 (1995).

ADMINISTRATIVE RESPONSIBILITIES

University of Rochester Institute for the Performing Arts

2015-present. Founding Director. Duties include development and management of a wide range of activities in supporting, cultivating, and promoting the performing arts on campus, in Rochester, and in the Western New York region. Development of significant partnerships with local and regional performing arts organizations and government agencies. Leadership in promoting the mission and vision of the institute and fund-raising on behalf of the institute, the College, and the University. Supervising and designing all aspects of website and overseeing all social networking strategy and implementation.

University of Rochester Institute for Popular Music

2012-present. Founding Director. Duties include development and management of a wide range of activities, including lecture series, symposia, workshops, performances, public and

professional outreach, advancement, budgeting, planning, and relationships with the Advisory Board. Design and implementation of online strategies, including supervising website, designing and managing video content, social networking, and public awareness. The UR IPM is now among the most recognized institutes of its kind in the world.

University of Rochester and The Eastman School of Music

2006-2015. Chair, College Music Department. Duties included oversight and management of all personnel matters, design and implementation of academic and performance curricula, authority over department budget (\$1,500,000+ approx.), design and management of public and professional outreach, leadership in advancement and alumni relations (working closely with University Advancement), as well as strategic planning, and fostering and maintaining relationships within the College, and with other units of the University, especially the Eastman School of Music. Significant gifts cultivated and finalized during this period (some gifts and amounts confidential, but overall total well exceeds three times the operating budget). Led curriculum expansion and diversification. Supervised faculty reorganization and expansion. Led departmental move to larger, more modern facilities.

Various department, college, and university committees at UR and Eastman.

University of North Carolina

2001-2005. Faculty Mentor, Carolina Scholars Program. Duties included mentoring a small group of highly gifted students, meeting with them individually and organizing social and educational events.

2001-2002. Associate Chair and Director of Graduate Studies, Music Department. Duties included assisting the Chair in department business and organization, overseeing all academic offerings, scheduling academic courses and making teaching assignments, overseeing all areas of the graduate program, advising all graduate students, and coordinating guest lectures, events, and receptions. During my tenure a number of significant changes were made to the graduate curriculum and to graduate advising.

1996-99. Director of Undergraduate Studies, Music Department. Duties included advising all music majors (approximately 160) and coordinating undergraduate course offerings in academic and performance areas. I led a thorough revision of the undergraduate curricula in the department, bringing it into closer conformance with other programs and broadening the scope of subject matter included.

1996-2000. Undergraduate Advisor, College of Arts and Sciences. Duties included advising Music, Art and Art History, and Anthropology majors in their comprehensive degree requirements. During my last year I was a member of the Senior Team, auditing the files of graduating seniors for graduation.

Various department, college, and university committees at UNC.

University of North Texas

1993-95. Member, College of Music Executive Committee. Duties included weekly meetings with the Dean to discuss issues within the College (including the construction of a new concert hall) and to engage in strategic planning.

1991-93. Member, Faculty Senate.

Various department and College of Music committees.